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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,681	09/17/2004	Tadashi Hashimoto	P25806	5276
7055	7590	12/16/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			DESAI, HEMANT	
			ART UNIT	PAPER NUMBER
			3721	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

JP

Office Action Summary	Application No. 10/506,681	Applicant(s) HASHIMOTO ET AL.	
	Examiner Hemant M. Desai	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/15/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 9, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "deep blades" (claim 7, line 2) is confusing because it is not understood which deep blade applicant is referring to, since there is no deep blade in claim 1.

"the thickness direction....grooves." (claims 9 and 12, lines 1-2) is confusing because it is not understood what exactly applicant meant by "the thickness direction". Further it is not understood what applicant is meant by "formed in the bottom between the grooves".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patents 2001-293777 ('777).

Japanese Patent '777 discloses a plastic sheet (1, figs. 1-7) with folding rules (2, figs. 1-7), being a plastic sheet provided with concave folding rules composed of a pair of side faces inclined at specified angle and mutually facing oppositely, and a narrow bottom face consecutive to an end of side faces, wherein shallow grooves (4, figs. 1-7) are formed at specified intervals in the longitudinal direction along the bottom face of the folding rules, and a plurality of deeper grooves (3, figs. 1-7) than the shallow grooves are formed in the longitudinal direction along the bottom face between the shallow grooves, which meets all the claimed limitations.

Regarding claim 2, the deep grooves are formed at different depths (see fig. 1-7).

Regarding claim 7, the deep grooves are set at dimensions deeper by a specified rate from the shallow grooves.

5. Claims 4-6, 14-21 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 2001-062909 ('909).

Japanese Patent ('909) discloses a rule cutter for plastic sheet used in forming folding rules in folding portions of plastic sheet, comprising a pair of side faces inclined at specified angle and mutually facing oppositely, and a narrow top face consecutive to an end of side faces, wherein blades of shallow infeed are formed at specified intervals in the longitudinal direction (14, fig. 6) along the top face of the rule cutter, and a plurality of blades of deeper infeed (15, fig. 6) than the shallow blades are formed in the longitudinal direction along the top face between the shallow blades, which meets all the claimed limitations.

Regarding claim 5, the shallow blades are set at different depths of infeed.

Regarding claim 6, Japanese Patent discloses blades of medium infeed (16, figs. 6-7).

Regarding claims 14-21, Japanese Patent ('909) discloses the claimed plastic sheet with folding rules having plurality of grooves at different depths (see figs. 6-7) and a rule cutter to form the folding rules as claimed in claims 14-21.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 8-13 and 22-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawata et al. (6666808).

Kawata et al. Discloses a plastic sheet (10, fig. 9) with folding rules (12, fig. 9), being a plastic sheet provided with concave folding rules (fig. 8A) composed of a pair of side faces inclined at specified angle and mutually facing oppositely, and a narrow bottom face consecutive to an end of side faces, characterized by forming a plurality of grooves shallower than the folding rules in the overall length of bottom of folding rules (see col. 6, lines 33-37), and inclining the grooves at a specified angle to the rule forming direction of folding rules to arrange in a rope pattern (see fig. 9), which meets all the claimed limitations.

Regarding claim 9, the holes are formed in the bottom between grooves.

Regarding claim 10, the dimensions of parts of grooves are set in dimensions included in a specified range suited to folding of the plastic sheet.

Regarding claims 11-13, Kawata et al. discloses a rule cutter as claimed in claims 11-13.

Regarding claim 22, Kawata discloses, as mentioned above, the plastic sheet (10) with folding rules (12) provided with concave folding rules (fig. 8A) composed of a pair of side faces inclined at specified angle and mutually facing oppositely, and a narrow bottom face consecutive to an end of side faces, characterized by forming a plurality of grooves shallower than the folding rules in the overall length of bottom of folding rules (see col. 6, lines 33-37), and inclining the grooves at a specified angle to the rule forming direction of folding rules, angle and mutually facing oppositely, and a narrow bottom face consecutive to an end of side faces, characterized by: forming a plurality of shallower grooves than folding rules and deeper grooves than shallow grooves, in the longitudinal direction along the bottom of folding rules, and forming a plurality of smaller protrusions (14, fig. 3A) than the grooves in the longitudinal direction along the top of the grooves.

Regarding claim 23, the small protrusions are formed in the shallow grooves and deep grooves.

Regarding claim 24, the shallow grooves and deep grooves are formed at different depths or same depth.

Regarding claim 25, the grooves and protrusions are formed in a specified size depending on the thickness of the plastic sheet.

Regarding claim 26, the grooves and protrusions are formed in a smooth curvature as seen from the longitudinal direction of the folding rules (see fig. 3A).

Regarding claim 27, Kawata discloses a rule cutter for plastic sheet used in forming folding rules in folding portions of plastic sheet, comprising a pair of side faces inclined at specified angle and mutually facing oppositely (see figs. 2A-2C), and a narrow top face consecutive to an end of side faces, characterized by forming a plurality of shallower blades than folding rules and deeper blades than shallow blades (see col. 6, lines 33-37), in the longitudinal direction along the top of the rule cutter, and forming a plurality of smaller recesses (26, fig. 2C) than the blades in the longitudinal direction along the bottom of the blades.

Regarding claim 28, the small recesses are formed in the shallow blades and deep blades.

Regarding claim 29, the shallow blades and deep blades are formed at different depth or same depth.

Regarding claim 30, the blades and recesses are formed in a specified dimension depending on the thickness of the plastic sheet.

Regarding claim 31, the blades and recesses are formed in a smooth curvature as seen from the longitudinal direction of the rule cutter.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent ('777) in view of Japanese Patent 8-39661 (661).

Japanese Patent (777), as mentioned above discloses all the limitations, except for grooves of medium depth. However, Japanese Patent ('661) teaches grooves of medium depth (H53, fig. 4) to prevent breakage and for the ease of bending and reinforcement. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the grooves of medium depth as taught by Japanese Patent ('661) in the plastic sheet with folding rules of Japanese Patent ('777) to prevent breakage and for the ease of bending and reinforcement.

Conclusion

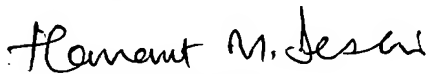
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemant M. Desai whose telephone number is (571) 272-4458. The examiner can normally be reached on 7:00 AM-5: 30 PM, Mon-Thurs..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hemant M Desai
Examiner
Art Unit 3721

HMD